

MEDION®



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1. About this manual

Before you start the safety instructions carefully. Note the warnings on the device and in the manual. Keep this manual always close to hand. If you sell the device or pass on, please be sure to include this manual and the warranty card.



1.1. Symbols and signal words used in these instructions

DANGER!

Warning of immediate danger to life! WARNING!

Warning of possible danger to life and / or serious irreversible injuries reindeer! ATTENTION!



Warning of possible medium and or minor injuries!

ATTENTION!

Follow instructions to avoid damage to property!





NOTE!

Further information for the use of the device!



NOTE!

	Advice in the manual!
	WARNING! Warning of danger of electrical shock!
•	Bulb / information on events during operation
•	Action to guide

1.2. Intended Use

This camera is for capturing photos and videos in digital format.

- The device is intended for use only the private and not for industrial / commercial overall.

Please note that in case of improper use will void the liability:

- Do not install the unit without our consent order and do not use non-approved or supplied by us accessories.
- Use only supplied or approved by us spare parts and accessories.
- Observe all information in this manual, especially cherheitshinweise the Si. Any other use is considered improper use and can cause injury or property damage.

Do not use the device in extreme environments.

1.3. CE compliance

Hereby, ~~Medion AG, agrees that this product meets with the following European arrival:~~

- EMC Directive 2004/108 / EC
- RoHS Directive 2011/65 / EU.

Complete declarations of conformity are available under
www.medion.com/conformity.

2. Safety

2.1. General

This device is not intended for use by persons (including by children) with reduced physical, sensory or mental abilities or lack of experience and / or by persons lacking knowledge, unless they are supervised by a person responsible for their safety or they have been instructed how the device is to be used.

Keep the device and accessories in a un- attainable for children Place.

DANGER!

Keep the packaging away from children. There is risk of suffocation!



2.2. Notice regarding power disconnection

- In order to interrupt the power supply to your device, unplug the AC adapter from the wall socket. Always hold the AC adapter / power plug itself when pulling. Never pull on the cable to avoid damage.
- Disconnect the power adapter when not in use from the power outlet or use a master / slave power strip to prevent the power consumption in the off state.
- Sockets to charge the battery must be located near the device and easily accessible. Lay the Ka bel so that no one can step on or trip over them.

- Operate the power adapter only on grounded sockets with 230 V ~ 50Hz. If you ~~lun~~sort the power supply at the installation site are not sure, ask the relevant energy supplier.
- Do not cover the AC adapter to avoid damage through unacceptable warming.
- Do not use the AC adapter if the housing or cable is damaged to the device. Replace the network adapter with a same type.
- Use only the included AC adapter model **KSAS0060500100VEU** Because it can otherwise be damaged.

2.3. warnings

To avoid injury, please observe the following warnings when using the product:

- Do not fire the flash in to short distance from the eyes. In this case, the subject's eyes can be damaged.
- Stay away at least one meter from children when working with the flash.
- Do not open or disassemble the unit.
- Connect only to a properly in- stalled mains socket of 230 V AC 50/60 Hz to the USB power adapter.

- Only use the included USB power adapter (Ktec KSAS0060500100VEU) And the supplied battery (NP-50) with the camera!

- When disassembling the device, the risk of Hochspan- is voltage electric shock. Tests of internal components, modifications and repairs must advertising carried out by specialists to. Bring the product for inspection to an authorized service center.
- The outlet must be near the equipment and shall be accessible without difficulty.
- If you do not use the camera for an extended period, remove the battery to prevent leakage to comparable.
- The camera or USB power adapter should not be exposed to dripping or splashing. Make no tes sigkeit filled our liquefied objects (eg. As vases) near the device-or on them.

2.4. battery notes

You can operate your camera with the battery. Laser to the battery with the included USB power adapter.

Note the following general instructions for handling AK-kus:

- Keep batteries out of children. If a battery swallowed wur- de, seek immediate medical attention.

WARNING!

Risk of explosion if improper replacement of the battery.



Never substitute an equivalent AK- only with the same or.

- Check before inserting the battery, whether the contacts in the device and on the batteries are clean and clean them if necessary.
- Put basically only the supplied battery.
- When inserting the battery, the polarity (+/-).
- Store the battery in a cool, dry place. Direct intense heat can damage the battery. therefore expose the device to strong heat sources.
- Avoid contact with skin, eyes and mucous membranes. On contact with battery acid, immediately rinse the affected area with plenty of clean water and seek medical attention when necessary.
- Do not throw the battery into a fire, do not connect it short and do not take it apart.
- Insert the battery never excessive heat such as solar radiation, fire or similar!
- If you do not use the unit for an extended period, remove the battery.
- Take the battery is leaking from the device immediately. Remove the contacts before inserting a new battery. They contain corrosive materials from battery acid!

- Also remove an empty battery from the device.
- ~~At low temperatures, the capacity of the battery may significantly abneh~~
men by slowing the chemical reaction. Make sure you have a second battery in a warm place (eg trouser pocket) for shooting in cold weather.
- Avoid shocks or impacts acting on the battery, do not squeeze him, do not let him fall.

2.5. Precautions

Please observe the following precautions to prevent dam- to your camera and keep it always in perfect condition:

- store dry
This camera is not waterproof and therefore does not work properly when it is immersed in water or if liquids enter the interior of the camera.
- Keep away from moisture, salt and dust
Wipe salt and dust with a damp, soft cloth when you verwen- the camera at the beach or at the lake have det. Dry the camera followed carefully.
- Keep away from strong magnetic fields. Bring the camera-ra never in too much near devices that generate strong electromagnetic fields, such as electric motors. Strong magnetic fields can cause malfunction of the camera or disrupt the data recording.

- Avoid excessive heat

~~Do not use or store the camera under sunlight or high temperatures. Such~~
loading can lead to leakage, or to deformation of the housing.

- Avoid strong temperature fluctuations

If you move the unit quickly from a cold environment to a warm environment or vice versa, condensation can form which can lead to malfunctions and damage to the equipment in and on the device. Wait with the commissioning until the temperature of the device has adjusted to the ambient temperature. The use of a transport or plastic bag offers limited protection against temperature fluctuations.

- Device not drop

Strong, caused when falling shock or vibration functions, which can cause malfunctions. Place the carrying loop around your wrist when you carry the camera.

- Do not remove the battery, when processing data, when image data is recorded on memory cards or deleted may result in or turning off the power supply to a data loss damage the internal circuit or the storage cher.

- treat the lens and all moving parts carefully Do not touch the lens and the lens barrel. Be careful when handling the memory card and the battery. _____
These parts are not designed for heavy loads.

- batteries

At low temperatures, the battery capacity can be greatly disadvantage.
When photographing in cold weather, keep a warm spare battery.

If the battery terminals are dirty, clean it with a dry, clean cloth or use an eraser to remove residues.

- memory cards

Turn off the power before the te Speicherkar- inserting or removing.
Otherwise, the memory card may become unstable. Memory cards can be dung warm during Verwen-. Take the memory card always cautious from the camera.

NOTE!

MicroSD cards are consumables and must be replaced after
longed use.



For a longer useful life, recording may be faulty. Therefore, check
regularly Aufnah- meleistung the map and replace it if necessary.

2.6. Correct repair

WARNING!

Try under any circumstances, open the device itself or to repair.



There is a risk of electric shock!

- Apply to be avoided in case of failure of the Medion Service Center or other suitable specialist workshop hazards.

3. delivery

Please check the delivery is complete and inform us within half 14 days after purchase if delivery is not complete.

With The purchased product includes the following:

- Camera MD 86929
- 2 x 3.7 V lithium ion battery
- 4 GB SDHC Memory Card
- USB cable
- USB power adapter
- AV cable
- Lanyard
- lens loop
- lens cover
- Storage bag VG0692173A90090
- Software CD-ROM
- documentation

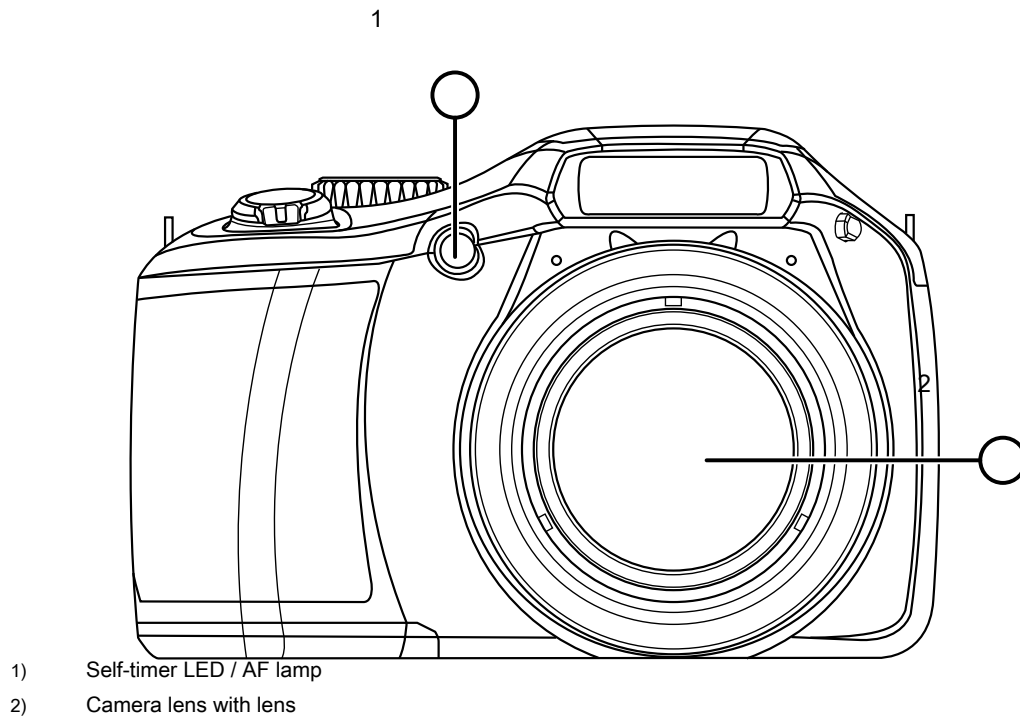
DANGER!

Keep the packaging away from children. There is risk of suffocation!

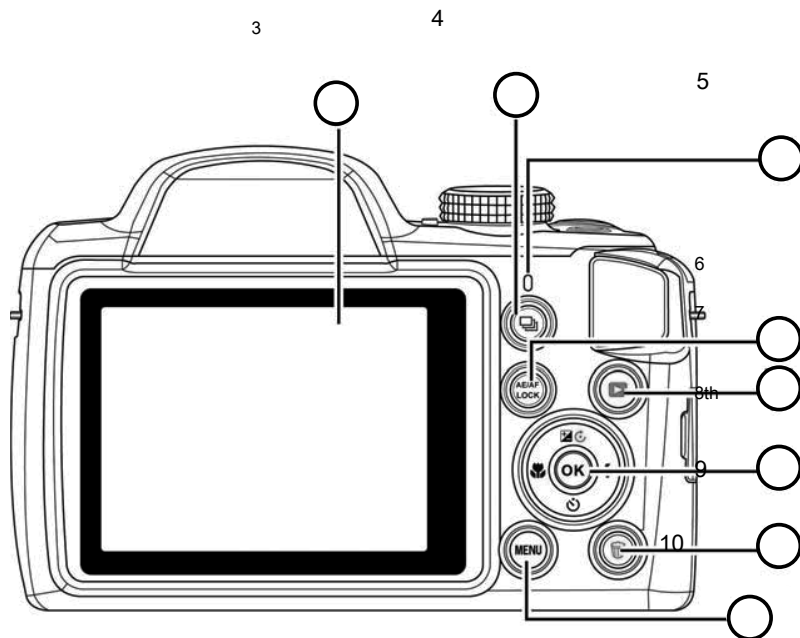



4. Product Overview

4.1. front

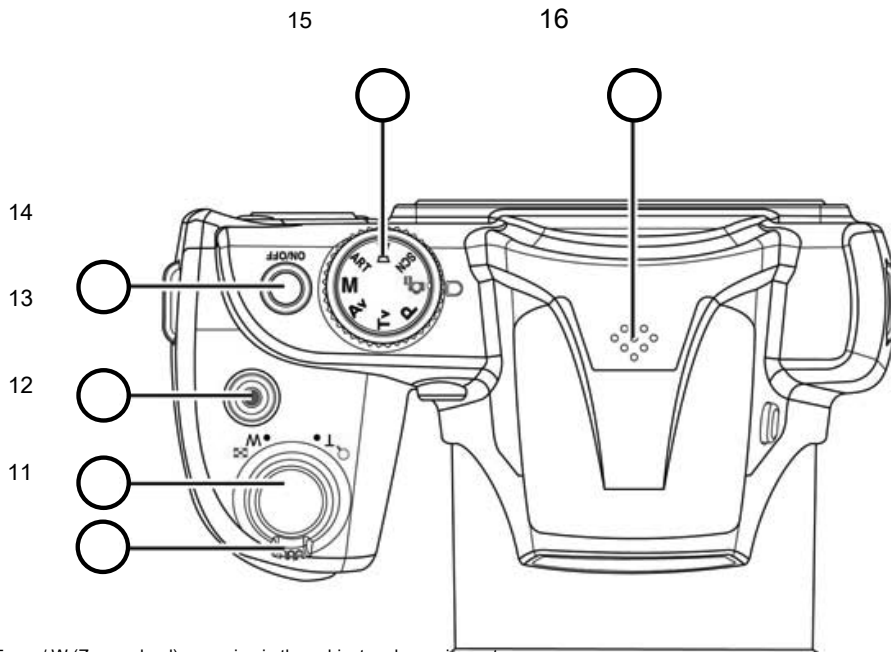




4.2. back



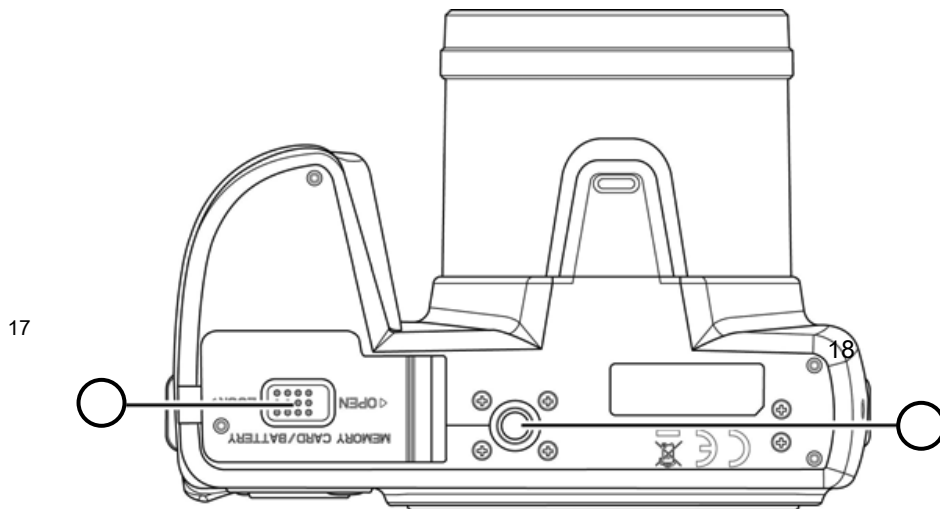
- (3) LC display
- (4) Series Record button
- (5) LED display
- (6) AE / AF LOCK button
- (7) : Playback button
- (8th) **QM** - Navigation keys Key /
- (9) Trash: Delete 
- (10) **OGPW**: call menu

4.3. top



- 11) T / W (Zoom wheel): screwing in the subject and zooming out
- 12) (Press half: activate autofocus) Trigger
- 13) Video button  
- 14) **QP1QHH: on or off camera**
- 15) Mode dial: set various photo / video modes
- 16) Microphone

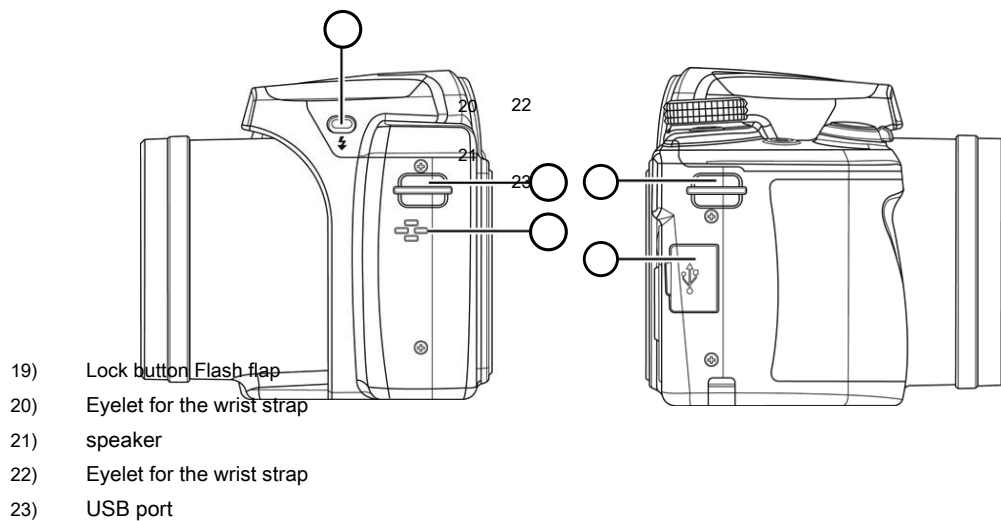
4.4. bottom



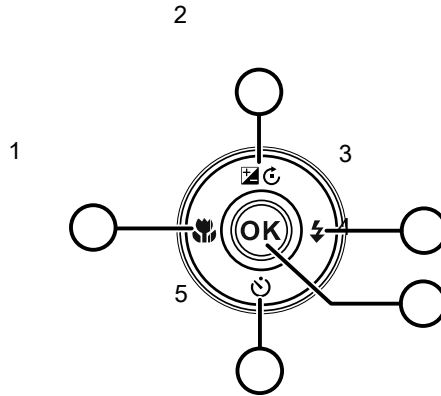
17) Battery / memory card cover

18) tripod mount

19



4.6. navigation key



1)

In playback mode:

View previous recording




Video playback:

Fast rewind or fast forward one turn off



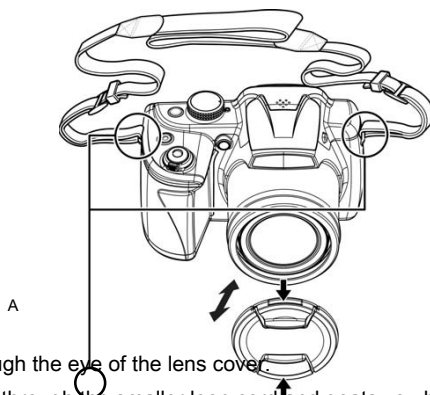
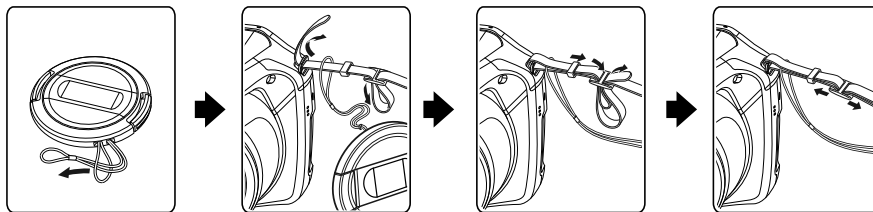
in the menu

Exit menu / submenu to go through the menus / submenus to the left

2)	In Video How- dergabemodus: Start playback / pause mode in the photo re-	
		Image by 90 ° turn
	in the menu	go to the menu / submenu upward
	In Capture mode:	select Flash style
3)	In playback mode	See next picture
	Video playback:	Fast forward on or rewind switch off
	 in the menu	Open menu / submenu menus within the menus / sub go right
	In playback mode video / audio:	Play sound
4) QM	in the menu	In the menus / submenus confirm a selection
	In Capture mode:	Show self-timer options
5)	playing Stop play: video / audio	
	 in the menu	go to the menu / submenu downward

5.1. Replace lens cover and carrying strap

Fix for better handling of the camera and for safety reasons the strap.



- Perform the smaller loop through the eye of the lens cover.
- Pull the other end of the strap through the smaller loop cord and goats you hen the loop tight.
- Run a strap of the strap through the other end of the strap to the lens cover.
- Run the strap end of the strap from below through the loop of the belt holder passes and then into the belt buckle.

- Then pull the belt as shown in the figure, nours by the Rieme-.

- Pull the strap to make sure it will not come out of the eyelet.
- Please make sure the strap is securely attached at two points (A).
- The cover serves to protect the lens. Please make sure not to lose the cap.

DANGER!

A turning the belt around your neck is dangerous. Make sure that children do not place the strap around her neck.



ATTENTION!

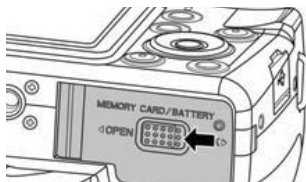
If you carry the camera with the wrist strap, make sure that the camera does not bump. When attaching the hand loop, load area the camera on a solid top, so it can not fall and be damaged.

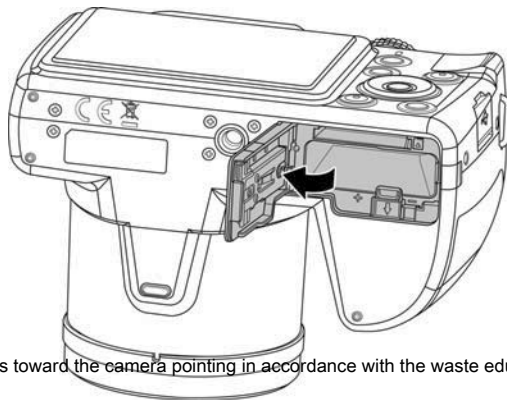


5.2. insert battery

one of the supplied lithium-ion battery is required to operate the camera.

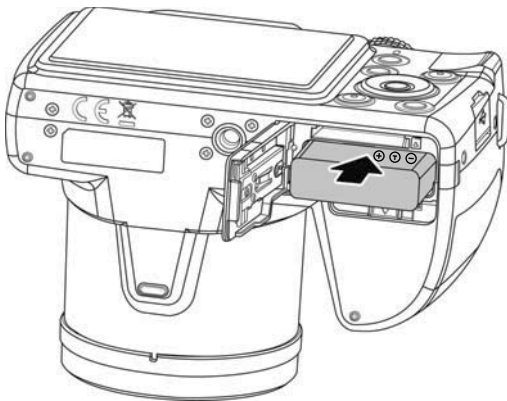
- Turn off the camera.
- Slide the catch of the battery compartment cover in the direction **QRGP** and open the cover as illustrated.



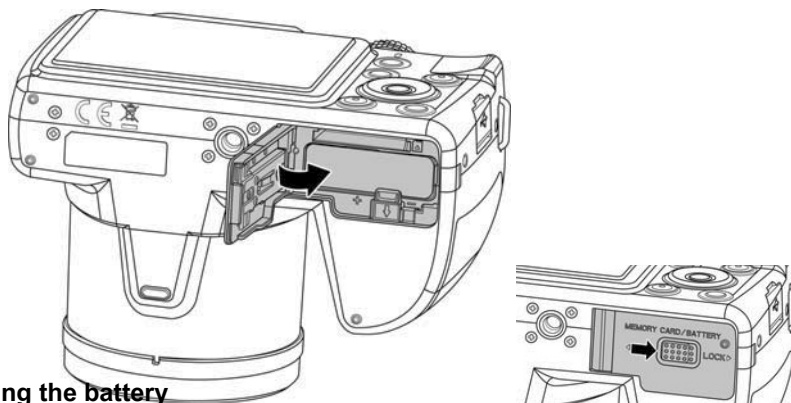


- Insert the battery with the contacts toward the camera pointing in accordance with the waste education.

Press the battery carefully into the camera until it clicks.

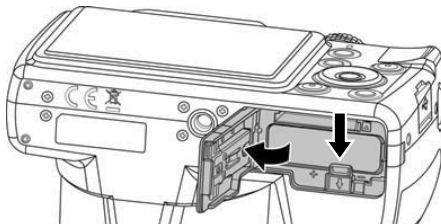


- Close the battery compartment cover in the arrow direction and slide the stopper in the direction **NQEM**.



5.3. Removing the battery

- To detach the battery, open the battery compartment as described.
- Press the battery latch down gently so that the battery will be ejected a piece and can be easily removed.



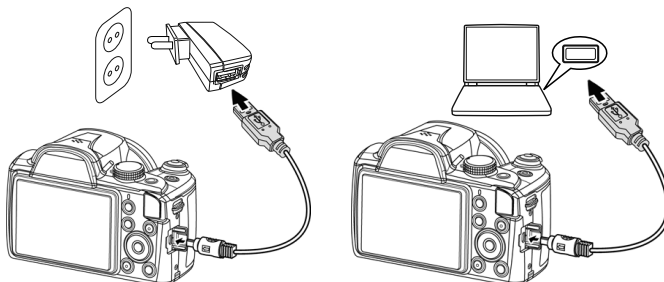
5.4. Charging the battery via USB

NOTE!

When you purchase the battery is not charged. You must charge the battery before using the camera.

You can charge the battery using either the provided USB power adapter or via the USB port of your PC or another device with a USB port.

- Connect the USB cable to the camera
- Connect the other end to the USB power adapter and plug it into the outlet.
- Alternatively, connect the camera using the included USB cable to the USB port of your PC or another device with a USB port.



NOTE!

Charging the battery via the included power supply is only possible when the camera is off.



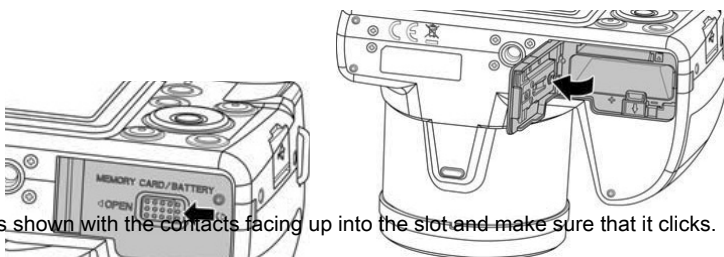
5.5. Insert the SD card and remove

If no card is inserted, the pictures in the internal memory are stored. Please note that the internal memory is limited.

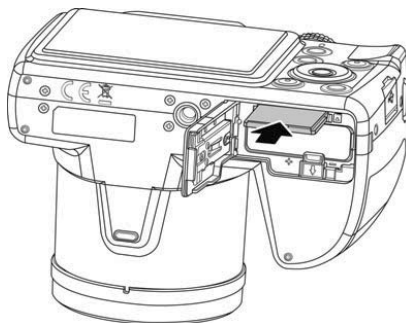
Therefore, use an SD memory card to increase the memory capacity. When a card is inserted, the images on the card are stored.

5.5.1. use the card

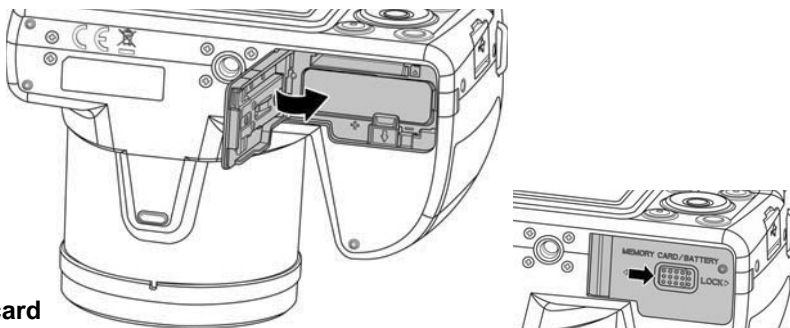
- Turn off the camera if necessary.
- Slide the locking latch of the battery compartment on the arrow.
- Hold the lock bolt in position and slide the lid of the battery compartment on the arrow. The battery compartment opens.



- Insert the card as shown with the contacts facing up into the slot and make sure that it clicks.



Close the battery compartment and close the locking latch.



5.5.2. take card

- To remove the card, first open the battery compartment, as described above ben.
- Then press the card briefly to unlock it. The card is ejected part way out and can be removed.
- Plug the battery compartment, as described above.

6. Getting Started

6.1. switch on camera

- Press the key **QP1QHH**, to turn on the camera. The lens extends, the power light is green and the display turns on. The camera is in recording mode.

NOTE!

If the camera does not turn on, check whether the battery is inserted correctly and that it is charged.



6.2. Switch off camera

- Press the key **QP1QHH**, to turn off the camera.

6.3. Setting the language and date / time

When you turn on the camera for the first time, you are prompted to set language and time.

6.3.1. Setting the language

- Use the buttons **• / •** and **• / •** the desired language.
- Confirm your selection by pressing the **QM** Button.

After selecting the language, the camera automatically switches to the menu for setting the date and time.

6.3.2. Setting date and time

- Use the buttons **•** and **•** the corresponding value for the date or time.
- With the keys **•** and **•** move to the next entry
- Confirm the settings by pressing **QM**.

- **YY / MM / DD** (Year month day);
- **MM / DD / YY** (Month / day / year);
- **DD / MM / YY** (Day month Year)

NOTE!

Date and time can be browser displays from the camera in Playback mode. This information can be also adds einge- the bottom right of the photo, if earlier, the date stamp function is activated (see page 56 "Recording menu").



The time setting is retained by the internal battery. She goes JE but lost when the battery for more than 48 hours from the camera corresponds removed.

6.4. Power Saving Function



If the camera is not used for 60 seconds, the camera turns off. You can set the automatic switch-off on 3 or 5 minutes or completely deactivated fours.

The power saving function is not active:


- during the recording of audio and video clips;
- during the reproduction of images, video clips or audio recordings;
- while the camera is connected via the USB port with another device.



6.5. Recording and playback mode

After switching on the recording mode is active: You can make just photos. In playback mode, you can play, edit and delete photos, audio and video clips.

- To enter the playback mode, press the button , the Wiederga-
besymbol appears on the left top of the display. The last image is shown Toggle.
- To return to shooting mode, press the button again ,

6.6. video mode

You can record video clips. Press the key 

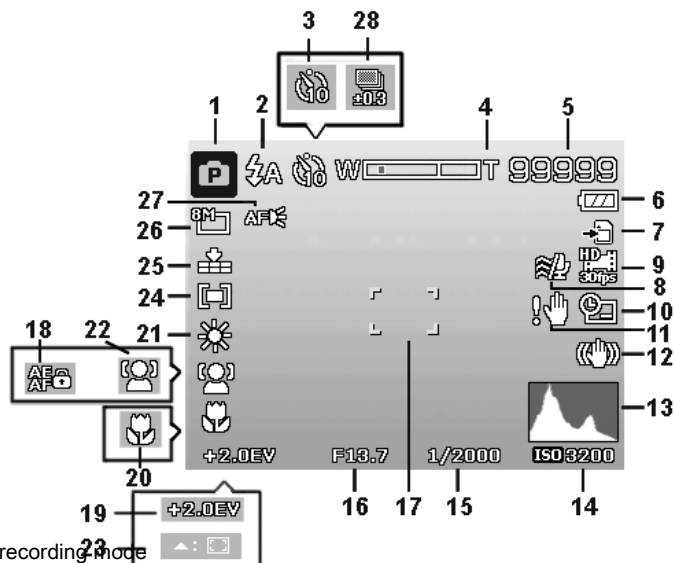
Press the key  to start a video recording.
Press the key  again to stop video recording.



7. Display ads

7.1. Displays for recording

In recording mode, the following displays are possible:

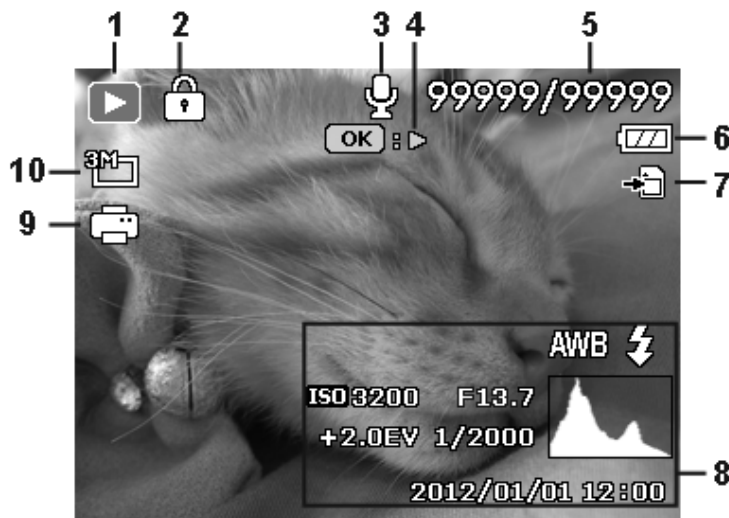


- 1) Display current recording mode
- 2) flash setting
- 3) self-timer
- 4) Zoom adjustment
- 5) Remaining recording / recording time (at the current resolution)
- 6) battery status
- 7) Location (internal memory or card)
- 8th) Wind Slash turned
- 9) Display of video resolution

- 10) date stamp
- 11) Warning: camera shake!
- 12) Image Stabilizer turned on
- 13) histogram
- 14) ISO setting
- 15) Displays the shutter speed
- 16) aperture setting
- 17) focus area
- 18) activated AE / AF lock
- 19) exposure Control
- 20) Macro setting
- 21) White Balance
- 22) face recognition
- 23) AF tracing active
- 24) metering
- 25) quality setting
- 26) Size / Resolution
- 27) AF lamp activated
- 28) bracketing

7.2. Display ads for the Photo Playback

In playback mode, the following displays are possible:



- 1) Display of the mode (recording or reproduction)
- 2) The image is protected
- 3) Sound recording
- 4) Recalling key function
- 5) Current / Total number of shots
- 6) battery status
- 7) Location (internal memory or card)
- 8th) Shooting information
- 9) DPOF enabled
- 10) Resolution of the currently displayed image

7.3. Display ads for the video playback

In playback mode for video clips following displays are possible:






- 1) Display Mode (Play)
- 2) The video is protected
- 3) video recording
- 4) Recalling key function
- 5) Current / Total number of shots
- 6) battery status
- 7) Location (internal memory or card)
- 8th) Shooting information
- 9) Resolution / File Size
- 10) Recalling key function
- 11) video length
- 12) playing time
- 13) Specifies the playback status (play / pause)
- 14) Recalling key function

7.4. Turning Display ads on and off

In the settings menu you can turn the displays, switch off or show in detail under "Display Mode".

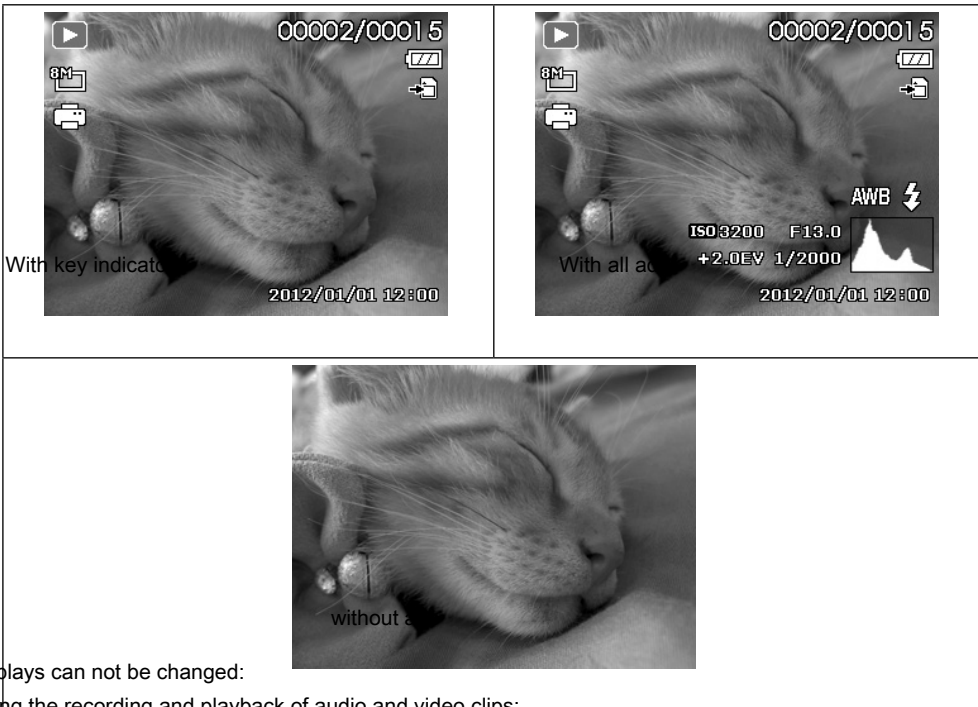
- Use the buttons • and • the settings menu.
- Confirm your selection by pressing the **QM** Button.
- Use the buttons • and • the display mode menu.
- Confirm your selection by pressing the **QM** Button.
- Use the buttons • and • the display mode and confirm the initial choice by pressing the **QM** Button.

7.4.1. In recording mode

 <p>With key indicators</p>	 <p>Detailed info (With all ads)</p>
 <p>without ads</p> <p>NOTE!</p>	

The screens may vary depending on the recording mode.





The displays can not be changed:

- during the recording and playback of audio and video clips;
- displayed during a slideshow or thumbnails;
- is cut during a photo (in edit mode).

8. make First recordings

8.1. Setting the recording mode

When the camera is turned on, the recording mode is automatically activated. Top left of the display symbol for the selected shooting mode appears. More about the recording mode and the symbols see page 82nd

8.2. Tips for good image recordings

- Press the shutter button, the camera must not move. Move the camera immediately after pressing the shutter button. Wait for the trigger signal. If necessary, use a tripod or the image stabilizer (see page 44) to the camera to provide stability and prevent camera shake.
- Look at the subject on the screen before pressing the shutter button.
- The main motive should occupy most of the picture and dominate it. Overall you then always close enough to the subject.
- Pay for landscape and building shots on capturing not too much of the area in the photo.
- Think for portraits because the face is the decisive motive, lower body or shoes are not relevant here and do not belong in the picture.
- Pictures look more interesting to the viewer when the subject is not exactly in the center but something is placed on the edge.
- Plenty of photographic opportunities are lost because of the background distracts too much. Change the shooting angle to obtain a neutral background as possible.
- Orient yourself for landscapes on the rule of thirds, ie the image is divided into three horizontal areas and the photographer can affect the way the image with the layout. Recordings with a division of 1/3 and 2/3 sky soil appear calm and idyllic at the viewer, while images with a division of 2/3 and 1/3 sky soil affect the viewer more dynamic and lively.

For this type of landscape photography, the image division lines (see page 40) very helpful, because Las align important image objects at the intersections sen.

- Enter your images depth by capturing multiple layers in the image, such. For example, by choosing a suitable front and / or background.
- Select the image format to match the subject, such. B. towers and tall buildings look even more impressive on portrait-style shots.
- Try to tell a story with your images; often enough 4 or 5 images in order to make a story out of the snapshot.
- Check the angle if the subject is backlit. Change your position to reduce the backlight.
- Experiment with different perspectives to make images for the viewer interesting.
- The tips on good slides listed, can be applied to use for video capture, Please observe correct this in addition to, pan the camera slowly to-keep quiet. If you pan too quickly, video recordings are blurry blurred and comparable. Even when shooting video tripod can be very helpful.

8.3. Take photo

- Select the desired scene from the display.
- Press the shutter button down a bit, switch In order to limit the autofocus.

Once the autofocus has focused, the yellow image cutout characters appear green.

The image cutout characters appear red when the auto focus is unable to focus.

There appear the values of the shutter speed, aperture and ISO value.

- Press the shutter button fully to take the picture. A tone is signaling to that the photo was taken (if **this function settings previously input menu SOUNDS was adjusted (see page 63). Photos are saved as JPEG files.**

NOTE!

If the recording threatens to blur, the icon also appears

In this case, you should hold the camera steady to switch the image stabilizer or use a tripod.



Enable the image stabilizer mode by pressing the **Fn** button to provide to **ER- Close** button.

8.3.1. use stabilizer



The image stabilizer compensates for any slight movements of the camera, for. For example, by shaking, and thus preventing a camera shake.

- From the camera menu item "**STABILIZER**" And turn the function on or off here.

NOTE!

When using a tripod or lighting is adequate, you do not need the image stabilizer.



8.3.2. use flash

When the light for the photo is not enough, the built-in flash can provide what is necessary che additional light.

By repeatedly pressing the flash button, select the following flash settings:

AUTO: The flash is activated automatically when shooting conditions require extra

	With pre-flash before the regular flash; red-eye. The camera detects the brightness of objects and flash only when necessary. Forced Flash
	"Slow Sync": The flash is synchronized with slow shutter speed.

The flash only works in single and self-timer mode. It can not be used in image sequences and video recordings.

By using the flash, the battery consumption increases. When the battery is running low, the flash will take longer to load.

ATTENTION!

not flash people and animals at close. Keep at least 1 meter



8.3.3. Zoom in or out

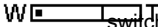
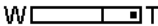
The camera has an optical and a digital zoom. The optical zoom is achieved by adjusting the lens of the digital zoom is activated by the adjustment menu.

- Press the zoom lever toward **Y** or **V** , It seems the bar, the zoom setting reproduces.

Y : The image is zoomed out ("Wide"); They cover a larger cut off

v : The image is zoomed in ("telephoto"); You create a smaller area.

the marking is on the left side of the beam, the optimum specific zoom is applied.

 	<p>Press again, the digital zoom is automatically switched on. You can continue to zoom in to the factor. 8 For this purpose must be turned on in the settings menu, digital zoom!</p>
--	--

NOTE!

For video recording, digital zoom is not available. When the digital zoom of the enlarged image will be enlarged by interpolation; the picture quality may suffer somewhat.



8.3.4. Setting the Focus Mode

This function allows you to define the type focus when you take a photo or a video.

- Press the macro button repeated until the icon of the desired focus mode is displayed.
- Confirm your selection by pressing **QM**.

Your camera offers four different focus modes:

AF - Autofocus

In this setting, the camera automatically focuses on objects.

- macro

This mode is designed for close-ups. In this mode, you can capture the detail and the subject even at low distance sharply by fixed focus. Approximate Focus: approximately 1 cm to 50 cm.



- Super macro

This mode is designed for close-ups. In this mode, you can capture the detail and the subject even at low distance sharply by fixed focus. Approximate Focus Range: Approximately 1 cm to 30 cm. If Super Macro is set, the focus can not be adjusted.



- infinitely

When set to infinity, the camera focuses on distant objects.



8.3.5. Using the AE / AF LOCK button

Take advantage of the **CG 1CH "NQEM"** Button on the camera to lock focus and exposure.

- To lock AE / AF, press during video recording on the AE / AF LOCK button or press the shutter button halfway and then in photo mode on **CG 1CH "NQEM"** Button. The AE / AF remains locked even if the initial





- solver is released.
- You can unlock AE / AF at one of the following ways:
- **Press the CG 1CH "NQEM- button**
- Rotate the zoom control
- Turn the mode dial
- Press the MENU / Playback / Video / On / Off button on another functional execute

8.3.6. Using the timer

The self-timer allows recording of images according to a preset delay. With the sequence shooting, you can make continuous Aufnah- men, however. This feature is only available when taking photos. From that position for the self-timer will turn off automatically when you turn the camera off.

Activating the self-timer:





- Press the **UGNDUVCWUNáUGT1WPVGP-** Button on your camera to display the self-timer function.
- To select self-timer options, press • or •. Press the **QM** to save the settings and take over key. Your camera has three self-timer modes:

OUT	The self-timer is turned off.
10 SEK. 	The image is men aufgenom- 10 seconds after pressing the shutter button.
2 SEK. 	The image is men aufgenom- 2 seconds after pressing the shutter button.
DOUBLE 	There are added two images. The first 10 seconds, the two te 12 seconds after pressing the shutter button.
	

8.4. record video clips

In addition to the photo, the camera offers the possibility of video clips up zuzeichnen and thus save not only rigid, but also moving images.



- Press the record button "  to start recording.
- Press the zoom lever toward "Y"  or "V"  to zoom in or challenges zuzoomen and to change the image.
- To stop recording, press the record button "  again.

NOTE!

The **digital Zoom** and **flash** are not available for recording video clips.



g video recording, the microphone is active simultaneously, and the sound is recorded.

ns video recordings are saved with sound as AVI files.

8.4.1. PIV function (Picture in Video)

You have the option to create a photo during video recording:

- Press during the video shoot the shutter button fully down, the display shows an icon is displayed during video recording.
- If you press down the shutter button, the current screen can be saved as a photo without the video recording will stop.



After taking a picture, a symbol, and the number of shots on the display. If the number of shots has reached the maximum number of shots, the icon on the screen turns red and shooting will not be made.

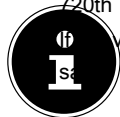
NOTE!

Please note that the video recording continues even when the Ka has become merasymbol red. The PIV function can be applied only to deogrößen following Vi: 720p30



NOTE!

in the video size 720p (30fps), the captured images are stored at a resolution of 1280 x 720th



video size is VGA (30fps), the photos will be saved with a resolution of 640 x 480 for

9.1. display pictures individually

You can give the recordings made most recently in display mode successively re.

- Press the play button  to switch to playback mode.

The last recorded image appears on the display, depending on the type the following displays are possible:



- Press the keys  or  to the previous or next recording to se-


9.2. play back the pictures as thumbnails

- In Playback mode, press the zoom wheel once counter-clockwise to display up to nine thumbnail images.



- Using the directional keys • or •• • or ••• You can select a desired mo.
- Press the key **QM**, for inclusion as a full screen display.
- Press the zoom wheel once in a clockwise direction to return to return to-full-screen view.

Some miniature views contain icons that indicate the file type.

bad file		Indicates a faulty file
		


9.2.1. zoom into photos

In photographs you can view individual image sections.



- Repeatedly pressing the Zoomrads clockwise (to the right) in the full-screen view, you can store up to 12 times zoom the image. By repeatedly pressing the zoom wheel in the direction **V** " . You can also view

Decrease again.

- The four arrows at the edge indicate that the image section is enlarged. 
- Using the directional keys **.....** or **•** You can also change the image section within the image.
- Press the key **OGPW**, to return to full screen.

9.3. play video and voice notes



- Select the desired recording.
- Press the key **QM**, to start playback.
- When playing video clips, press the keys • or •• to start fast forward or rewind.
- Press the zoom button gegen-clockwise (to the left) to decrease the volume.
- Press the zoom button clockwise (to the right) to heights to ER volume.
- If you want to stop playback, press the button •.
- Press the key • again to resume playback.
- The video forward frame by frame or rewind, press • to pause playback and then click • or •.
- If you want to stop playing, press •.

9.4. Deleting Pictures

NOTE!


If a memory card is inserted, you can delete only the files on the memory card.




If the memory card is read-only, you can not delete the existing files on the memory card. (There the message "Card locked".)

A deleted file can not be restored. Therefore please be careful when deleting files.



9.4.1. individual files

- Select the playback mode using the keys **•** or **•** an image.
- Press the key **•** to the menu options for the delete function display.
- Choose "**INDIVIDUALLY**" And press the **QM** To delete button to select sumption.

- Choose "**ABORT, STOP**" And confirm with the **QM** Button to return dergabemodus in the How-.

9.4.2. multiple files

- Press the key **•** to the menu options for the clear, easy navigation display.
- Choose "**MULTI**" And press the **QM** Button to zulöschenden sumption select the thumbnail.

- Use the buttons **•** or **•** an image and insert the key **•** a deletion mark or raise a pre-defined deletion mark with the key **•** again.
- If you want to leave the thumbnail without deleting, press the button **OGPW**. All existing laws extinguishing brands lost.
- Now confirm the selection with the **QM** Click and select "**YES**" And confirm by pressing the **QM** Delete key to all selected files.
- Choose "**ABORT, STOP**" And confirm with the **QM** Button to return dergabemodus in the How-.

9.4.3. All files

- Select the playback mode using the keys • or • an image.
- Press the key  to the menu options for the clear, easy navigation display.
- Choose " **ALL** "And press the **QM** Button.
- Choose " **YES** "And confirm with the  **QM** To delete all files button.
- Choose " **ABORT, STOP** "And confirm with the **QM** Button to return dergabemodus in the How-.

NOTE!

Protected files can not be deleted, in this case, the message " **FILE PROTECTED** " on the display. If a memory card is inserted, you can delete only the files on the memory card.



When the memory card is locked, you can not delete the existing files on the memory card.

A deleted file can not be restored. Therefore please be careful when deleting files.

10. The menus




10.1. Navigating the menus

- Press the key **OGPW**, to open the menus.
- Use the arrow keys **◀** or **▶** to change the menu.
- Press the key **QM** or key **•**. This opens the corresponding sub-menu.
- Use the arrow keys **◀** or **▶** to select the desired option and confirm with the key **QM**.
- With the key **OGPW** come back at any time in the previous level.


10.2. The photo shooting menu




The resolution determines the quality of the image substantially. The higher the


IMAGE SIZE	large prints len (larger than A4) or subsequent image sections be recommended.	
	20 M	5152 x 3864
	8M	3264 x 2448
	5 M	2592 x 1944
	3 M	2048 x 1536
	VGA	640 x 480
	3: 2	5152 x 3435
	16: 9 (2M)	1920 x 1080
	1: 1	2992 x 2992
	Superfine: 5x compression rate	
QUALITY	 Fine: 8x compression rate	
	 Normal: 12x compression rate	
		


AWB function **WB SHIFT.**
For more information about this feature also "WB-Shift" on page 61. Appropriate for shooting in bright daylight.

 Suitable for shooting under a cloudy sky, twilight or shadow.

 Suitable for shooting under incandescent lighting.

 Suitable for photos under fluorescent reddish light.

 Suitable for photos under fluorescent, bluish light.

 For more accurate adjustment or when the light source can not be specified up.

NOTE!

To the right attitude to the FIN, aim the camera under the lighting conditions for you want to set the white balance on a sheet of paper or a similar object ches. Pressing the button • on the 4-way control, the camera sets the white balance.



White balance

ISO (LIGHT SENSITIVITY)

negatively affect the image quality. Therefore, set the ISO value according to the shooting conditions as low as possible.

ISO AUTO Automatic ISO.

ISO 100 Sets the sensitivity to ISO 100th

ISO 200 Sets the sensitivity to ISO 200th

ISO 400 Sets the sensitivity to ISO 400th

ISO 800 Sets the sensitivity to ISO 800th

ISO 1600 Sets the sensitivity to ISO 1600th

ISO 3200 Sets the sensitivity to ISO 3200th

ISO 6400 Sets the sensitivity to ISO 6400th

NOTE!

An ISO value of **ISO 3200** or **ISO 6400**

set, before the dissolution stage must **3M** have been asked



With this function, the camera can automatically processing conditions between ISO 100 and set for the maximum sensitivity value the ISO value depending on the imagesetter. Between the available options are 200 (default), 400, 800th

MAXIMUM ISO AUTO

With this function, you can determine which area is to be the light measurement for the photo or video.

MEASUREMENT

Selects an exposure based on measurement results at several points in the receiving area. The light of the



entire recording area is measured, however, comes the values near the center higher weight to. Selects an



exposure based on a single reading in the image center.



Imagesetter
TUNG SERIES

Standard exposure, underexposure and overexposure.

From

± 0.3

Aperture stop ±

0.7

Aperture stop ±

1.0

f-stop

Here you can choose the autofocus (AF) area.

The camera automatically detects faces.

AF AREA



A wide range is in focus.



The center is focused. The camera is kussieren the moving subject and f-o th the focus automatically



beibehal-.



AF LAMP You can see the AF lamp (ou automatic mode automation
TABLE) or switch off, the AF lamp (OUT).

This feature enables the detection of the exposure or focus, or both, by pressing the AE / AF LOCK button. You can set the AE / AF LOCK button on one of the following func- tions:

AE / AF-L

AE-L

Exposure to lock / unlock.

AF-L

Lock / Unlock focus.

AE-L & AF-L Exposure and focus lock / unlock.

DIGITAL
ZOOM

Here you can set the digital zoom or function Deak tivieren (OUT).

Here you can choose to print the date and time on the images.

DATE STAMP	DATE DATE /	
	TIME	
	OUT	
AUTO-VOR LOOKING	After recording, the picture taken for a few seconds is displayed. You can enable or disable this feature.	
	Here you can set the blink or disable (OUT).	
BLINZELER- IDENTIFICATION	If the camera a blink after a photo was taken, recognize the option TO SAVE or ABORT, STOP shown on the display.	
	This function is only activated if the face recognition is ac- tivated.	
LINE	The grid line function is kept as a function available in the preview: On off.	
stabilizers GATE	You can switch the automatic image stabilization or switch off.	
WB-Shift		

The function WB shift, you have the opportunity to take the white balance manually vorzu-. For this purpose, please move it with the 4-way control the Fa denkreuz in the display of the display to the desired color segment.

10.3. The video recording menu



The resolution determines the quality of the image substantially. The higher the

FILM MODE	720P30	Video resolution 1280x720 30 frames per second (using egg ner Class 6 SDHC memory card)
	VGAP30	Video resolution 640x480 30 fps
VORAUFGRAUF- TAKEOVER	You can catch the first three seconds of action you would miss if necessary. With activated pre-recording the camera-ra automatically start the video recording before the shutter button is fully pressed.	
WIND CUT	This feature allows you to reduce wind noise in video admission.	
continuum IERLICHER AF	With this feature, you can take up videos with the autofocus method. Possible settings are At and Out	

10.4. The settings menu



S.SOUND

Here you can select one of three tones as startup

TRIGGER

Here you can turn on or off the sound when triggered

VOLUME

Adjusting the volume for sounds

To save battery power, the camera turns off automatically after the selected time.

Choose: **1 min., 3 min., 5 min. or**

OUT.

The power saving function is not active:

- during the recording of audio and video clips;
- took during playback of images, video clips or audio recordings;
- while the camera is connected via the USB port with another device.

POWER SAVE

DATE TIME

Here you can set the date, set the time and select the display format of the date.
(See page 33)

LANGUAGE Here you can select the language of the menu. (See page 33)

DISPLAY

MOD

With the TV setting function allows you to adjust video output signal to accommodate different regional settings. If the TV inputs are positions not set correctly, the image may not be displayed properly on TV.

The video output signal can be changed according to local standards: **NTSC** or **PAL**.

Here you can adjust the brightness of the display.

AUTOMATICALLY Automatic adjustment of LCD brightness

BRIGHT	Display is brightened
---------------	-----------------------

NORMAL standard brightness

Formats the memory card or the internal memory. Here advertising deleted the all recordings.	
--	--

NOTE!

If you format the memory, all is stored data deleted.



are sure that no important data in storage located cher or SD

Here you can access the factory default reset all individual settings payments.

Confirm in this case, the query " **YES** ".

The following settings are not reset:

- date and time
- language
- TV system

10.5. The playback menu

If you want to open the playback menu, go first to the Wiederga- configuration mode is by pressing the button

SLIDE SHOW You can (only photos) run as a slide show, the image recordings.

This feature allows you to protect recordings from accidental solu- rule.

PROTECT

You've got the following possibilities:

- INDIVIDUALLY** protect a taking
- MULTI** protect several shots that you select in the thumbnail.

- PROTECT ALL** Protect all recordings
- ALL ENTSPER- REN** remove protection for all recordings.

You can save for each photo taken a voice memo (see page 86).

**VOICE
MEMO**

- Select a photo to add a voice memo to be created.
- Choose **UVCTV "** and then press the button "**QM**, to start recording.
- Press the key **QM** again to stop recording. The maximum duration of the voice memo is 30 seconds. The remaining term is displayed on the screen.

If there is already a voice memo to the selected photo, it will be overwritten.

**FILTEREF-
fect SOFT**

The image is hen verse- with a soft effect.

- Choose between the area **WIDE, NORMAL** or **NARROW**

FARBVERSTÄR-		Choose the color with arrow keys • or. **
FILTEREF- fect		black / white shown. The image is provided with more contrast and saturation, draw special attention to the bold colors.
	ALIVE	<ul style="list-style-type: none"> Press the key QM " and then select TO SAVE, to activate the function. <p>Parts of the photos are blurred to make the scene look like a miniature model. It is recommended from a high angle take aufzu- to simulate the miniature effect.</p>
	MINIATURE EFFECT	<ul style="list-style-type: none"> Press the key QM " and then select TO SAVE, to activate the function. <p>The image is provided with star-shaped Lichtreflexionen.</p>
	ASTRAL	<ul style="list-style-type: none"> Press the key QM " and then select TO SAVE, to activate the function. <p>The image is provided with a dramatic contrast.</p>
	IMPRESSIVE ART	<ul style="list-style-type: none"> Press the key QM " and then select TO SAVE, to activate the function. <p>The picture will look comparable with a watercolor effect.</p>
	PAINTING	<ul style="list-style-type: none"> Press the key QM " and then select TO SAVE, to activate the function.

FILTEREF- fect

S / W

activate the function.

The image is black / white shown.

- **Press the key QM " and then select TO SAVE, to**

activate the function.

MOSAIC

The image is displayed with mosaic parts

- **Press the key QM " and then select TO SAVE, to**

activate the function.

SEPIA

The picture is displayed in sepia colors.

- **Press the key QM " and then select TO SAVE, to**

activate the function.

Cropping You can crop a photo shoot on a different size.

CLOSE

Schneider

THE

- Select a photo you want to crop.
- Call the menu cropping.
- Change the crop by rotating the zoom wheel.
- **Move the trimming with the arrow keys • • •**
- **and •.**
- **Press the key QM " and then select TO SAVE, to save the changes.**

NOTE!

Trim function is not available for images with the image size VGA.



Images are displayed in 4: 3 cut, irrespective of the original aspect

- Choose between the image sizes **640**, **320** or **160th**

and press **QM** " If you want to run the selected functional on again.

CHANGE SIZE

NOTE!

The function is only for photos in 4: 3 aspect ratio availability bar.



size can not be changed by already resized photos one more

You can choose a starting image that appears on the screen after turning on the camera. You can choose between:

START IMAGE

SYSTEM: The standard system image is displayed.

MY PICTURE: The selected photo is displayed.

OUT: There is no picture displayed. Press • or • the entry **My IMAGE**. Press • or • the photo and press **QM** for confirmation.

DPOF		many. This information is stored in the internal memory or on a memory card. If the pressure is started, the Drucker read the embedded on the memory card and print the specified images.
		<ul style="list-style-type: none"> Press • or •• under CHOOSE PICTURES the education of that you want to print on the memory card. Press • or •• at the selected frame, the number of copies you want to print. Press the key QM " and select concludes FINISHED, to save the settings. <p>If you want to reject the DPOF settings, select the menu item RESET TO DEFAULT and press QM</p>
COPY		Copies recordings from internal memory to the memory card.
	COPY TO CARD	Select the images you want to copy. Press the key QM " and "Choose with • or • YES and if you want to run the selected function.
FILM ON ADD	ON CAMERA KO PIEREN	Copies images on the memory card to the internal memory.
		Use this function to two videos with the same specifications (video size and resolution) to connect to a recording. Press • the movie that you want to add another film (AT). With the key • Remove the check mark again. Then select the movie, the film is to be added and Press the key QM " and "Choose with • or • YES .

The function to retouch faces can be applied to images taken with face detection.



FACE
SCHIEREN

SMOOTH, Lighten, EYE ZOOM.

- Choose **TO SAVE**, to secure the settings.

11. The mode dial

It can be adjusted by rotating the mode wheel 8 shooting, DAR under an gep. Scene shooting mode, Advanced Shooting, shooting, Manuel- le exposure, aperture, shutter setting and program. With a single rotation of the wheel mode, the selected mode is immediately started automatically even in the playback mode, or during the video recording. In Scene Mode **UEP** You can choose between different shooting modes to get a better result at the desired scene. The following functions are available:

SCN		send scene mode (see page 73).
	RECORD MODE	For specific shooting situations or subjects you can select preset Aufnah- memodi in which a pre-programmed auto setting is used (see page 82).
	PANORAMA	Use this feature to create a patent noramafoto by mera pan or tilt the Ka.
ART		ART EFFECT
M	MANUAL imagesetter	This feature applies different art effects to photos.
	FUNG	With this function, you can set the encryption circuit speed and the aperture value (see page 84).
AV	BLENDENEINSTEL	With this function, you can set the glare value. The camera will automatically select the
	LUNG	Veschlussgeschwindigkeit off to adjust the brightness.

With this function, you can set the encryption

TV		
P	POSITION	blend value off to adjust the brightness.
	PROGRAM	The camera automatically sets the appropriate recording settings such. As exposure time and aperture values.

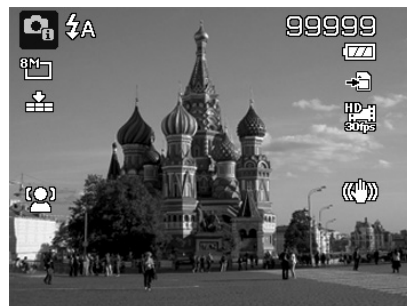
11.1. Using Mode Custom Scene

This feature is especially useful for beginners. You get respectable results without basic knowledge of photography and photographic technology to possess. If you set the camera to this mode, it automatically detects various ne 7 shooting modes, and selects this the optimal capture of. The camera automatically detects shooting modes Portrait, Landscape, Sonnenun- tergang, Macro, Backlit, Backlit Portrait, Night Scene and Night Portrait.

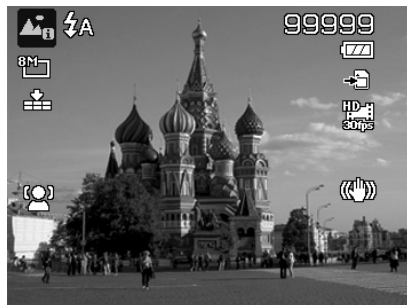
- Turn the dial to the position. in the upper left corner of the icon for the mode scene that appears in the display



- Focus the camera for recording the subject of the image by pressing the shutter button halfway.



- The camera analyzes the scene and selects the most appropriate capture. in the upper left corner of the icon for the detected mode appears on the display ER.



- Press the shutter button fully down to take the picture.

11.2. Use of the recording mode









The camera offers 17 modes to shoot with the most appropriate attitudes.











- Turn the dial to the position **UEP**. in the upper left corner of the icon for the selected mode is displayed.
- Press the key **OGPW**, to the selection menu.
- Go with the key **•** in the selection list of shooting modes.
- Use the buttons **••** the desired recording mode.
- Press the key **QM**, to confirm the selection.

11.2.1. The following shooting modes are available:

The following special recording modes specific settings (eg. As lightning, MAK ro) can not be changed because they are preset for the capture.

PORTRAIT Provides the backdrop to blurred and focused

	LANDSCAPE	Suitable for wide landscape sections.
	SONNENUN- TERGANG	Enhances the red hue for recording special nenuntergängen.
	GEGENLICHT	Adjusts the setting "measurement" of the backlight.
	CHILDREN	Suitable for placing individuals supply on the move.
	NACHTSZE- NE	reason for portraits with a dark back.
	FIREWORKS	Reduces the shutter speed to has fire take erwerk.
	SNOW	Used for the beach or snow scenes.
		

SPORTS		
	PARTY	Suitable for interior shots and parties.
	candle Light	Produced recordings in warm light.
	NACHTPORT-ADVISES	This function is comparable applies for taking pictures with egg ner night scene or a dark background.
	WUNNING WATER	A gentle effect during rapid movements of.
	food-TEL	Increases color saturation.
		This function uses the Face Detection for auto- matic detection of faces to produce to be applied in this way without support third portrait images.
	Romantik- PORTRAIT	If more than one face is detected, the autofocus is activated automatically. The camera starts count down and captures a picture in two seconds.
	SELF PORTRAIT	This feature set zoom to wide angle. When a face is detected, AF is automatically ac- tivated with a beep. The camera starts egg nen two seconds countdown and takes the shot.
	D-LIGHTING	This feature increases the dynamic range of a Image by increased brightness and contrast values.
	TIME LAPSE	Use this feature to share photos automatically record at the specified intervals.
		

12. The use of different recording modes

12.1. Using the Children mode

Children are especially difficult to photograph because they are almost always in motion and so challenging. Take children mode for children images. This mode uses a faster shutter speed and always focuses on the moving subject.

- in shooting mode, select the option.
- Confirm your selection by pressing **QM**.
- Focus the camera at the subject and press the shutter button.



12.2. Using the Sports mode

Athletic movements can often only be captured with a high shutter speed. On a photo of this kind, the Sports mode is particularly suitable. In this mode, the camera takes a photo with an extremely short shutter speed.

- in shooting mode, select the option.
- Confirm your selection by pressing **QM**.
- Focus the camera at the subject and press the shutter button.

12.3. Using the party mode

If you want to take pictures of groups, then the party-Modus is suitable for this purpose.

- in shooting mode, select the option.
- Confirm your selection by pressing **QM**.
- Focus the camera at the subject and press the shutter button.
- Enjoy yourself at your party.

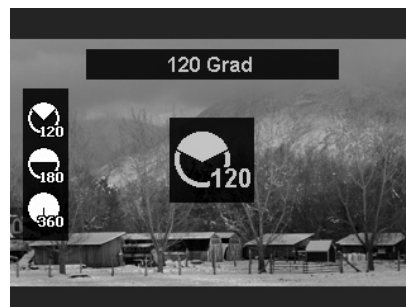
12.4. Using the Panorama mode

This feature allows you to create a panoramic picture. The camera supports this by supporting graphics and an automatically controlled trigger.

- Use the mode wheel option out. in the upper left-hand icon for the Panorama mode appears in the display



- Press the key ** around the Auswahlme- nu nen to be opened for the degrees of the panoramic image.
- Use the buttons • or • the desired degree of value, you can use the advertising to 120 °; 180 ° and 360 ° to disposal.
- Confirm your selection with the **QM** Button.



- Press the key **••** to open the selection menu for the shooting direction of the panoramic image.

- Use the buttons **•** or **•** the desired direction:

**FROM LEFT N. RIGHT BOTTOM TO
TOP TOP TO BOTTOM RIGHT SIDE
LEFT N.**

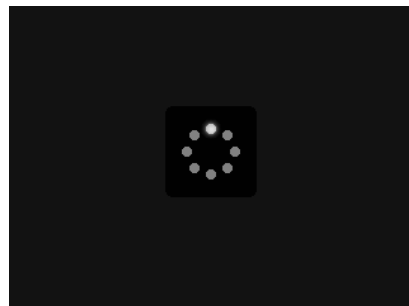
- Confirm your selection with the **QM** Button.
- Press the shutter button fully down to start recording.
- When recording begins, a white cross in the center of the screen is displayed. In addition, a yellow line, this is horizontally or vertically depending on the elected ter direction and serves for orientation of the camera is also displayed in the middle of the display panel.

At the bottom of a Aufnah- appear meleiste that fills up during the recording.

- For an ideal panorama shooting the yellow guide line must pass through the cross position always horizontally or vertically comparable.



- If the recording bar has completely filled, the recording is completed and the image is stored.



NOTE!

The following settings are defined for the panorama function and can not be changed:



The flash is always off.

The self-timer is turned off.

The autofocus is active.

- The autofocus area is on **WIDE** set.

12.4.1. Hints and tips for Panorama function






- The size of the composite image, depending on the pan angle and results of the composition, and the strength of the camera shake may be different.
- We recommend using a tripod to stabilize the camera and be able to move the camera while shooting better slowly.
- If you **FROM TOP TO BOTTOM** or **BOTTOM TO TOP** in the **360 ° Select Panorama**, it is recommended to rotate by **90 °** the camera to ensure stability during recording.
- Panorama mode irregular brightness can lead to differences in the overall recording made and the real motive.
- The longest recording time in Panorama mode is about 45 seconds.















• Set the shooting mode **ART EFFECT** and turn the camera's LCD screen **TV on**.

- Press the key **OGPA "** and select Picture Record menu, **ART EFFECT** out.

The following settings are possible:




 SOFT FOKUS	blur.	Produces a light veil over the photographed Obwalden ject to achieve the effect of a soft focus.
 LICHTFÄR-EXERCISE		Reduced to create a calm and corresponds tensed atmosphere the contrast.
 ALIVE	The camera is	the image with more contrast and saturation.
 MINIATUREF-EKFT		Blurred parts of the photo to make the scene look like a miniatures turmodell. It is recommended to take from a high angle to simulate the miniature effect ..
		

	ASTRAL	The image is provided with star-shaped light reflections.
	POSTER	This function takes pictures with the effect of a poster or illustration on.
	IMPRESSIVE ART	This function takes pictures with a dramatic contrast.
	S / W	Images are captured in black and white.
	SEPIA	Images are captured in sepia tones.
	HUE (RED)	Receives the red tone while the rest of the scene is black and white.
	TINT (ORANGE)	Receives the orange color while the rest of the scene is black and white.
	TINT (YELLOW)	Receives the yellow tone while the rest of the scene is black and white.
	TINT (GREEN)	Gets the shade of green while the rest of the scene is black and white.
	TINT (BLUE)	Receives the blue color while the rest of the scene is black and white.
	TINT (Illa)	Receives the mauve during the rest of the scene is black and white.
		

12.6. Using the continuous shooting mode

- Press the button  for continuous shooting.

SINGLE RECORD Press the shutter release button

	SEQUENCE	Keep pressing the shutter complete charge to a shooting to ma chen until you release the shutter or the memory card is full.
	SPEED BURST	Captures 30 images in a shot when the shutter button is pressed. The auto- matically set image size is 4: 3 VGA.
		

12.7. Using the mode aperture setting

This mode makes it possible to control the aperture values manually, the appropriate comparison circuit times are calculated automatically by the camera.

The aperture setting affects the depth of field of an image, when selecting a HO- hen panel (= possible small f-number) is focused only one object and the back- ground is indistinct.

Select a small aperture for an image in which all objects should be focused.

- Turn the dial to the position **CX**.
in the upper left corner of the icon for the mode aperture setting appears in the display **CX**.
- Press the key **QM**, around the Einstel- development mode display.
- Use the buttons **↔** the desired aperture value.
- Press the shutter button fully down to take the picture.



12.8. Using the mode lock setting


This mode is suitable for recording moving subjects. A fast shutter speed can freeze a motion (z. B. RACE de children) whereas a slower shutter speed movement produces (z. B. running water).

- Turn the dial to the position **VX**.
in the upper left corner of the icon for the mode aperture setting appears in the display **VX**.
- Press the key **QM**, around the Einstel- development mode display.
- Use the buttons **↔** the desired shutter value.
- Press the shutter button fully down to take the picture.



12.9. Using the manual exposure mode

This mode makes it possible to control the aperture value and / or shutter settings manually.

- Turn the dial to the position **O**.
in the upper left corner of the icon for the mode appears
tung manual imagesetter in the display.
- Press the key **QM**, around the Einstel- development
mode display. 
- Use the buttons **⬅** the desired shutter value.
- Use the buttons **➡** the desired aperture value.
- Press the key **QM**, to accept the settings.
- Press the shutter button fully down to take the picture.



13. Playback Functions

Call the playback function in which the key

to press.

Then press the button **OGPW**, to the playback menu.



13.1. show images in a slideshow

You can have the photos run as a slide show in memory of the camera.

- in the playback menu, select the entry **SLIDE**. The menu **SLIDE SHOW** opens.

The following settings are available:

- **BEGIN**: Select this option to start the slide show.
- **ABORT, STOP**: Select this option to exit the menu.
- **INTERVAL**: Set the duration of the image display this option to specify (**1, 3, 5** or **10** Seconds).
- **TO REPEAT**: Choose whether the image sequence will be repeated continuously () or should end after the last image ().
- When all settings are done, select the entry **BEGIN** and press **QM**, to start the slide show.
- During playback, you can use **QM** " stop playback and resume.

13.2. The functions of protecting and unlocking

13.2.1. individual files

- in the playback menu, select the entry " **PROTECT** "And then the option" **INDIVIDUALLY** " out.
- Select the playback mode using the keys • or • an image.
- Choose " **PROTECT** " or. " **UNLOCK** "And press the **QM** To protect the selected file or unlock button.
- Choose " **BREAK UP** "And confirm with the **QM** Button to return to the repro- duction mode.

13.2.2. multiple files

- in the playback menu, select the entry " **PROTECT** "And then the option" **MULTI** " out.
- Use the buttons • or • an image and insert the key •
a lock token or lift an already established brand lock with the key •
again.
- If you want to leave the thumbnail without storing the lock tokens, press **OGPW**. All existing laws
lock tokens are lost.
- Now confirm the selection with the **QM** Button.

13.2.3. All files

- Select the playback mode using the keys • or • an image.
- in the playback menu, select the entry " **PROTECT** "And then the option" **PROTECT ALL** " or. " **ALL
UNLOCK** " out.
- Choose " **YES** "And confirm with the **QM** to protect all files or unlock button.
- Choose " **ABORT, STOP** "And confirm with the **QM** Button to return dergabemodus in the How-.

13.3. record voice memo

- In playback mode, select the photo you want.

NOTE!

If the photo already contains a voice memo, the voice memo appears symbol



- Open the playback menu by pressing **OGPW** and select the option
Voice memo out.

The display shows the image preview and a selection menu will appear.

- Choose **BEGIN** and press **QM**, to start recording. The microphone is located below the lens.
- Recording stops automatically after 30 seconds. If you want to stop recording before you choose **STOP**
and press the button again **QM**.

NOTE!

You can only voice notes, add video clips not photos. Protected images, you can not add voice memos.



13.4. Filter effects

The filter effect function is only the aspect ratio of 4: 3 fekten with other artistic ef- available. The edited with this feature images are saved as new files.

The following effects are possible:

- **SOFT:** The image is provided with a soft effect.
- **COLOR GAIN:** Gets the shade while the rest of the scene
Black and white is.
- **ALIVE:** The image is provided with more contrast and saturation to kräfti-
ge highlight color stronger.
- **MINIATURE EFFECT:** Parts of the photos are blurred and let the Aufnah-
me like a miniature model appear.
- **ASTRAL:** Bright image areas are provided with stars.
- **IMPRESSIVE ART:** The image is verse- with a dramatic contrast
hen.
- **PAINTING:** The image is umgewan- in a line drawing with color accents
delt.
- **NEGATIVE:** The colors of the image are reversed.
- **B / W:** Black-and-white
- **MOSAIC:** The image is displayed pixelated
- **SEPIA:** The image is provided with a sepia tone.

13.5. cut out

With this feature you can select a picture and crop the image to this size. The invisible on the edge of the display will be deleted. The corrected file can be saved under a new name.



1 enlarged image 2 4-way display 3 Trimmed size

4	The approximate location of the trimmed image area 5

- In playback mode, select the photo you want.
- Open it in the Playback menu, select "CROP", the editing window appears on the display.
- Use the Zoom wheel to zoom out as the in-and manufacturers to change the crop box.
- During the magnification you can press • • • • • or • use to change the image.

After termination of the function, a menu selection appears. Choose between:

- **YES:** The new file is saved as a new file.
- **ABORT, STOP:** The function is canceled.
- to save / cancel changes Press **QM**.

13.6. change size

- In playback mode, select the photo you want.
- Open the playback menu by pressing **OGPW** and select the option **CHANGE SIZE**. the selection menu appears on the display.

- Select one of the following resolutions **640**, **320** or **160** and confirm the selection with the key **QM**.
-
- Confirm the Größe with:
 - **YES**: The new file is stored, or
 - **ABORT, STOP**: The function is canceled.
 - Confirm your selection by pressing **QM**.


NOTE!

The available resolutions can ieren vari- depending on the original image size. Settings that are not available are shown in gray.



13.7. start screen

You can choose a starting image that appears on the screen after turning on the camera.

- Go with the key **OGPW** in the playback mode.
 - Open the playback menu by pressing **OGPW** and select the menu item " **SPLASH SCREEN** " out.
- 
- You can choose between:
 - **SYSTEM**: The standard system image is displayed.
 - **MY PICTURE**: The selected photo is displayed. Press • or • the desired photo and press **QM** for confirmation.
 - **OUT**: There is no picture displayed.

13.8. DPOF

DPOF stands for "Digital Print Order Format".

You can specify print settings for images, if you want to display the images from a photo studio or a DPOF-compatible printer here. With a DPOF-compatible printer, you can print images directly, without transferring it to your computer before.



You can all the photos, print a photo or reset the DPOF settings. With the keys • or • set the number of prints for each photo.

NOTE!






You can specify up to 99 copies for DPOF. If you len 0 copies einstel-, the DPOF setting of that image is automatically disabled.

13.9. Copy function

With this function, you can copy pictures from internal memory to the memory card or from the memory card to the internal memory.

- Go with the key  in the playback mode.
- Open the playback menu by pressing **OGPW** and select the menu item "**COPY**" out.
-  Now select the copy option "**COPY TO CARD**" or. "**ON KA MERA COPY**" And confirm the selection with the key **QM**.
- In each copy option, you have two options available:
 - **CHOOSE PICTURES**: Here you can select the images to be copied first in a thumbnail overview.
 - **ALL PICTURES**: This function erases all images on the media you want copied.

13.9.1. Copy selected photos

- submenu of the copy function, select "**CHOOSE PICTURES**".
- Use the buttons  or  an image and insert the key  a selection of brand or lift an already set selection mark with the key sequence   again.
- Confirm your selection with the **QM** Button.
- Choose "**YES**" And confirm with the **QM** to protect all files or unlock button.
- Choose "**ABORT, STOP**" And confirm with the **QM** Button to return dergabemodus in the How-.

13.9.2. copy all images

- submenu of the copy function, select "**ALL PICTURES**".
- Confirm your selection with the **QM** Button.

- Choose "**YES**" And confirm with the **QM** to protect all files or unlock button.
- Choose "**ABORT, STOP**" And confirm with the **QM** Button to return dergabemodus in the How-.

10.13. "Insert Movie" function

With this function, you can combine two movies stored with the same specifications (video size and resolution) to a video.

- Select the playback mode using the keys **•** or **•** a video.
- Open the playback menu with the key sequence te **OGPW** and select the menu item "**FILM INSERT**" out.
- a thumbnail view of all video with the same specification as the original video appears on the display.
- Use the buttons **•** or **•** the two te video and insert with the key **•**
a selection of brand or raise Any treatment already set selection mark with the key **•** again.
- Confirm your selection by pressing **QM** and select "**YES**" In order to be connected to the video.



NOTE!

After the combination of the video is only the new, longer video in memory, the two individual videos will be deleted. The total length of the combined video must not exceed minutes.



14. Connecting to TV and PC

14.1. Show Pictures on a TV

You can play back the pictures the camera on a TV.

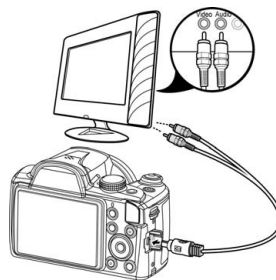
- Turn off the camera and TV.
- Connect to the AV cable to the USB port on the side of the camera.

- Turn on the camera and TV.

The camera automatically switches to Wiedergabemo- mode.

- Connect the other end of the cable to the AV in transition your TV.

- If the TV does not know the camera itself ER, turn the television to the video input (usually by pressing **CX**).

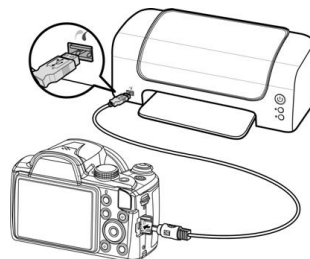


14.2. print pictures on a photo printer

You can print your pictures via PictBridge directly to a PictBridge compatible photo printer.

- Connect the printer and camera using supplied USB cable.

- Turn on the camera and photo printer. The camera detects that a USB device is connected and detect the printer automatically.



NOTE!

The functions described below must be supported by PICT Bridge compatible printer so that they are applied when necessary.



After the connection between the printer and camera is manufactured, the selection menu of the print mode is displayed.



Print Mode includes three choices:

- **SELECT PRINTING:** You can choose those you want to print out all the stored images.
- **PRINT ALL:** All stored images are printed.
- **DPOF PRINT:** Prints all the pictures are set with DOPF.

14.2.1. Setting the option "Selection"

- Use the arrow keys or the desired image.
- Set the number of prints with the buttons or firmly.
- With **QM** takes you to the printer settings.

14.2.2. Setting the option "Print All" and "DPOF Print"

- Set the number of prints with the buttons or firmly.
- With **QM** takes you to the printer settings.

14.2.3. Specify the print settings

- Use the arrow keys • or • the desired setting.
- Insert the paper size (**DEFAULT**) and quality (**DEFAULT**) th with the key sequence • or • firmly.
- Specify whether the recording date (**YES; NO**) and the recording information (**YES; NO**) to be printed.



- Choose **TO PRESS**, to start the print or exit the print settings menu with **STOP**.

14.2.4. start printing

the message "appears on the display **TO PRESS...** "

- You can initiate any time with the **OGPW**- Cancel tast.

14.3. transfer data to a computer

You can transfer the recordings to a computer. Supported Operating

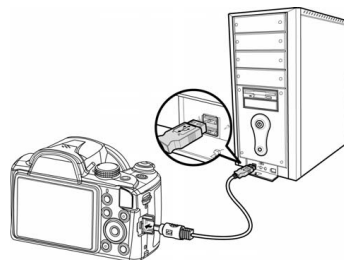
Systems:

- Windows Vista SP1
- Windows 7
- Windows 8
- Windows 8.1

14.4. Connect USB cable

- Turn off the camera.
- Connect the included USB cable at once switched computer with the USB connector on the camera and a USB port on the PC. When the compound of camera is manufactured with the computer "appears on the camera screen education choice **MASS STORAGE "Or" PTP**".

If you **MASS STORAGE** Select the Ka is mera recognized as mass storage device and displayed as a separate drive in Windows Explorer. Open Windows Explorer or double-click on "working beitsplatz" (Vista / Windows 7: "Computer").



- Double-click the media symbol for the camera.
- Navigate to the folder "DCIM" and possibly on the contained folder to see the files (* .jpg = photos; * .wav = sound recordings; * .avi = video recordings). See. Also Memory Folder Structure.
- Drag the desired files now hold down the left mouse button in the DA for specified folder on the PC such. B. in the folder "My Documents". They can characterize the files also highlight and use the Windows commands "Copy" and "Paste".

The files are transferred to the PC and stored there. You can view the file s with a suitable application software, play and edit.

If you **PTP** Select, the camera is bound as PTP (Picture Transfer Protocol) one.

In Windows Vista, Windows 7 and Windows 8, you can immediately to the contents of Ka meraspeichers or access the memory card.

14.5. DCF memory standard

The recordings on your camera (stored, etc.; named DCF = Design Rule for Camera File System) managed on the camera after so-called DCF standard. Recordings on memory cards of other DCF cameras can be given re on your camera.

14.6. Card drive

If your PC has a card drive or a card reader is connected, you can copy recordings to the memory card over to the PC. The card reader is also detected as a removable disk in the Windows desktop (or in Vista / Windows 7 / Windows 8 and Windows 8.1 "Computer").

14.7. Memory Folder Structure

Your camera automatically creates specific directory of folder in the internal storage cherkarte to organize captured images and video files.

- File names begin with "DSCI" and followed by a 4-digit number that in ascending order. File numbering starts from 0001 when a newly he folder is created.
- The highest file number is 9999. After 9999, the camera will start over with file number 0,001th

NOTE!

Do not change the folder and file name of the memory card from your PC. The data could then no longer be playable from the camera.



install a software

On the supplied CD is "CyberLink PhotoDirector," a program for processing your images

To install CyberLink PhotoDirector:

- Insert the installation CD into the DVD / CD drive.
- The CD will run automatically and displays a selection screen.
- Select "Install CyberLink PhotoDirector" entry in the selection screen.
- Follow the instructions to complete the installation.
- Start the program, if necessary, using the icon on the desktop.
- When you start the program for the first time, the program has enabled the advertising.

To do so, the serial number HEVK4-S9JM4-AWZXQ-SXML6-T8EQ9-PVSH7 one.

NOTE!

Help for the benefit of the program, see the help system software, this ru- you fen by pressing the button **H3** on.



If the CD does not run automatically, follow the steps below to install the software:

- Double-click My Computer.
- Move the mouse cursor on the DVD / CD drive.
- Right-click with the mouse, then click Open.
- Double-click setup.exe.
- A wizard will appear and guide you through the installation.
- Follow the instructions to complete the installation.
- Start the program via the icon on the desktop.
- When you start the program for the first time, the program has enabled the advertising.

To do so, the serial number HEVK4-S9JM4-AWZXQ-SXML6-T8EQ9-PVSH7 one.

15. Troubleshooting

If the camera does not work properly, check the following points. If the problem persists, contact the MEDION service.

15.7.1. The camera does not turn on.

- The batteries are inserted incorrectly.
- The batteries are empty.

15.7.2. The camera does not take photos.

- The flash is charging more.
- The memory is full.
- The SD card is not formatted correctly or is defective.

15.7.3. The flash does not fire.

- The flash is not popped up.
- The flash is not fully charged.
- The automatic mode is switched off.

15.7.4. The Picture is blurred.

- The camera was moved during the recording.
- The subject was outside the range of the camera. If necessary, use the macro mode for close-ups.
- Improve the lighting conditions.

15.7.5. The image is not displayed on the screen.

- It has been inserted an SD card that has taken on a different camera images in the non-DCF mode. Such images can not display the camera.

15.7.6. The time interval between images is longer in dark areas

- Under low light conditions the shutter normally operates slower. Change the camera angle or improve the light conditions.

15.7.7. The camera turns off.

- The batteries are empty.
 - The battery type is not set correctly.
 - The camera turns off after a preset time to save battery charge. Start the camera.
-

15.7.8. The recording was not saved.

- The camera was turned off before the recording could be saved.
- The memory card is full.

15.7.9. The recordings can not be transferred to the PC via the USB cable.

- The camera is not turned on.

15.07.10. The first time you connect the camera to the PC, no new hardware is found

- The USB port of the PC is turned off.
- The operating system is not compatible.

16. Maintenance and care

Clean the cabinet, the lens and the display as follows:

- Clean the camera body with a soft, dry cloth.
- Do not use thinner or cleaning agents containing oil. Thus, the camera may be damaged.
- To clean the lens or the display, remove the dust first with a dust blower. Clean them with a soft cloth. Do not press on the display and use of purifying any hard objects genstände.
- Do not use strong cleaning agents for the housing and the lens (our experts are on to the Medion Service or an authorized workshop, if dirt can not be removed).

17. disposal

PACKAGING

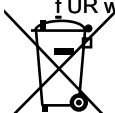
Your digital camera is to protect it from damage during transport, packaging, packaging and raw materials can be wiederverwertet or be fed to the recycling loop.

DEVICE



Take the device at the end of its life in your normal household waste. Dispose of it in an environmentally friendly manner through a local collection point for waste. Check with the local administration after the location of collection points.

BATTERY / BATTERIES



Remove batteries / rechargeable batteries out of the trash. The batteries / accumulators must be taken to a collection point for used batteries.



18. Technical Data

18.7.1. camera

Pixel:	20 Mega Pixel
Sensor:	20 MP CMOS 1 / 2.3 "
Cover:	F = 3.0 ~ 5.9
Shutter Speed:	1/2000 ~ 15 sec
Focal length:	f = 4.5 ~ 157.5 mm (equivalent to small format: 25 mm ~ 875 mm)
Optical zoom:	35 fold
Digital zoom:	8 fold
LCD Monitor:	7.62 cm / 3 "LCD - Display
File format:	JPEG (EXIF 2.3), DPOF, AVI, WAV
Max resolutions.:	
Camera mode:	5152 x 3864 pixels
Video mode:	1280 x 720 (30 fps.)
Image storage:	
internal:	128 MB internal memory (usable storage: around 72 MB)
External:	SD - card (up to 4 GB) SDHC card (up to 32 GB)
Connection:	Micro-USB 2.0 AV OUT
Dimensions:	approximately 128 x 86 x 91 mm (W x H x D)
Mass:	approximately 490 g (excluding batteries)
Ambient temperature:	0 ° - 40 ° C at 0% - 90% rel. humidity
USB POWER SUPPLY	
Model number:	KSAS0060500100VEU
Manufacturer:	Ktec, China
Input voltage:	100 - 240 VAC 50/60 Hz 180 mA
Output voltage:	5.0 V 1.0 A

Manufacturer:	Fuji Electronics
Model Number:	NP-120
Technical specifications:	3.7 V / 1700 mAh / Wh 6.29

Technical changes and misprints!

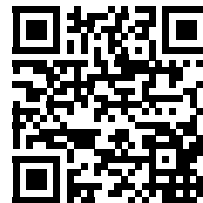
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